

ABSTRACT

An object is to provide a three-dimensional shape drawing device which is capable of drawing a three-dimensional shape at a high speed. A high order bit comparing section compares high order bits of a depth value retained by a high order Z-buffer memory with high order bits of a depth value calculated by a depth value calculation section. If these two sets of high order bits are same, a low order bit comparing section compares low order bits of the depth value retained by a low order Z-buffer memory with low order bits of the depth value calculated by the depth value calculation section. If a depth indicated by the high order bits of the depth value calculated by the depth value calculation section is shallow, the high order bits of the depth value retained by the high order Z-buffer memory and the low order bits of the depth value retained by the low order Z-buffer memory are updated. If a depth indicated by the low order bits of the depth value calculated by the depth value calculation section is shallow, the low order bits retained by the low order Z-buffer memory are updated.